The Taco Zone Sentry® Zone Valve enhances the overall performance of any zone valve system. The unique patented technology in the Zone Sentry® utilizes a microcircuit based logic to control a gear driven electronic actuator which drives a ball valve based body design. All this adds up to a zone valve that leads the industry in energy efficiency, flow capacity ($C_v$), shutoff pressure rating, ease of installation, diagnostic capability and the number of valves (12) that can be use on a standard 40VA transformer.
Submittal Data Information
Zone Sentry® Ball Valve Zone Valve

Application:
Taco Zone Sentry® Zone Valves provide on-off, normally open or normally closed control in both open and closed hydronic systems. The valves can be used in a wide variety of heating and cooling applications, primarily designed for use with baseboard, fan coils, radiators, convectors, air handlers, heat pumps and radiant applications.

Ease of Installation / Operation:
The Taco Zone Sentry® is the most technologically advanced zone valve ever made. It’s also simple to install and operate. The valve can be installed in any direction, in any orientation. We then went a step further, allowing the operator to be mounted to the valve body in either direction, great for those tight baseboard jobs. Snap-in quick connects on the back of the valve make for a simple, secure and fast wiring hook-up. A green LED light shows full functionality of the valve’s operation and thermostat status. Under a no power situation the manual override button located on the top of the valve allows the ball to be rotated up to 90° and is also marked with a slot to indicate the position of the valve.

Product Specifications
- Max. Operating Pressure: 300 PSI (2100 kPa)
- Max. Shutoff Pressure: 125 PSI (875 kPa)
- Fluid Temperature Range: 20-240°F (7˚-115˚C)
- Service: Water or Water/Glycol up to 50% Glycol
- Close Systems (Open System — Option Available)
- Ball Rotation Speed: (90° turn), Approximately (after charge time)
- Electrical Rating: 24 VAC, 60Hz, 0.48 Amps
- Power Consumption: 11.4 W, 0.48 Amps (Charging)
- Power Consumption: 1.44W, 0.06 Amps (Power On)
- Heat Anticipator Setting: 0.5 Amps
- End Switch Rating: 1 Amp @ 24 VAC

Materials of Construction, Actuator:
- Body: High Performance Engineered Polymer
- Gears: High Performance Internally Lubricated Engineered Polymer

Materials of Construction, Valve:
- Body: Forged Brass
- Stem: Brass
- Press Ring: Brass
- Ball: Brass (Chrome Plated)
- Seat: Modified Teflon®
- O-Rings: EPDM

Zone Sentry® Dimensions: (For Reference Purposes)

<table>
<thead>
<tr>
<th>Valve Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D (Sweat)</th>
<th>E (Threaded)</th>
<th>F</th>
<th>G</th>
<th>Weight (Valve + Actuator)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>3&quot;</td>
<td>76.2</td>
<td>2.375&quot;</td>
<td>60.3</td>
<td>4.125&quot;</td>
<td>104.7</td>
<td>2.06&quot;</td>
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</table>

** Typical Zone Sentry Zone Valve Wiring: **

**Valve Size** | **Cv (Kv) / Ft. of Pipe Equiv.** | **Close-Off Pressure (kPa)**
---|---|---
1/2" | 4.9 (4.3) / 9.5 | 0-125 psi (0-862 kPa)
3/4" | 10.3 (8.9) / 8.4 | 0-125 psi (0-862 kPa)
1" | 8.9 (7.7) / 47.4 | 0-125 psi (0-862 kPa)

**At 4' per second**
(Maximum recommended residential flow rate).